WHAT IS CLAIMED IS:

1. An array, comprising:

a polymeric substrate;

a coating comprising linking agents at least partially adhered to said substrate; and

a reactant affixed to said linking agents to form binding sites, wherein said coating comprising linking agents has a projected surface area and a topographical surface area and said topographical surface area is greater than said projected surface area.

2. The array of claim 1 wherein said coating comprising linking agents comprises an undulated surface.

3. The array of claim 1 wherein said topographical surface area is at least two times greater than said projected surface area.

4. The array of claim 1 wherein said topographical surface area is at least five times greater than said projected surface area.

5. The array of claim 1 wherein said topographical surface area is at least fifteen times greater than said projected surface area.

6. The array of claim 1 wherein the substrate is derived from a heat shrink film starting material.

7. The array of claim 6 wherein the substrate was heated to shrink the substrate.

8. The array of claim 7 wherein the substrate starting material is selected from the group consisting of a biaxially oriented low density polyethylene, a biaxially oriented linear low density polyethylene, a biaxially oriented ultra low density polyethylene, and a biaxially oriented ethylene vinyl acetate.

9. The array of claim 1 including a primer on said substrate.

10. The array of claim 9 wherein the primer is selected from the group consisting of polyethylenimine, polyvinylidenechloride, and colloidal dispersions of inorganic metal oxides in combination with ambifunctional silanes.

11. The array of claim 1 wherein the linking agents include an azlactone moiety.

12. The array of claim 1 wherein said reactant is selected from the group consisting of nucleic acids, proteins, and carbohydrates.

13. The array of claim 12 wherein said reactant is an oligonucleotide.

14. The array of claim 1 wherein said array includes a binding site density of between about 2,000 binding sites per square centimeter and 100,000 binding sites per square centimeter.

15. The array of claim 14 wherein said array includes a binding site density of over 60,000 binding sites per square centimeter.

16. A material for use in the manufacturing of arrays, comprising:

an oriented polymeric substrate and a coating of linking agents at least partially adhered thereto.

17. A method of manufacturing an array, comprising:

providing an oriented polymeric substrate;

applying a coating comprising linking agents on said polymeric substrate;

affixing reactants thereto to form binding sites; and

relaxing the substrate, wherein the coating has a topographical surface area and a projected surface area and said topographical surface area is greater than said projected surface area.

18. The method of claim 17 wherein said coating forms an undulated surface.

19. The method of claim 17 wherein said reactants are selected from the group consisting of nucleic acids, proteins and carboxylates.

20. A method of manufacturing an array, comprising:

a. affixing a reactant to an oriented polymeric substrate including a major surface with a surface area to create binding sites on said substrate; and

b. reducing the surface area of said major surface by heating said polymeric substrate, thereby increasing the density of binding sites on said substrate.

21. The method of claim 20 wherein the substrate is an oriented heat-shrink film.

22. The method of claim 21 wherein the oriented, heat shrink film is selected from the group consisting of a biaxially oriented low density polyethylene, a biaxially oriented linear low density polyethylene, a biaxially oriented ultra low density polyethylene and a biaxially oriented ethylene vinyl acetate.

23. The method of claim 20 wherein the substrate is an elastomeric material and further comprising the step of stretching said substrate prior to affixation of said reactant thereto.

24. The method of claim 23 wherein the elastomeric material is selected from the group consisting of polyisoprenes, nitriles, polyurethanes, and silicones.

25. The method of claim 24 further comprising the step of affixing a backing to said substrate after the surface area of said substrate has been reduced.

26. The method of claim 20 wherein the reactant is selected from the group consisting of a nucleic acid, an antibody, an enzyme and a carbohydrate.

27. The method of claim 26 wherein the nucleic acid is an oligonucleotide.

28. The method of claim 27 wherein different oligonucleotides are affixed at varying binding sites on the substrate.

29. The method of claim 20 wherein the density of binding sites on the substrate after reduction is increased by a factor of about 4.

30. The method of claim 20 wherein the density of binding sites on the substrate after reduction is increased by a factor of about 10.

31. The method of claim 20 wherein the density of binding sites on the substrate after reduction is increased by a factor of about 20 or above.

32. The method of claim 20 wherein the reactant is affixed to the substrate by covalently binding the reactant to the substrate.

33. The method of claim 20 wherein the reactant is affixed to the substrate by ionically binding the reactant to the substrate.

34. A method of manufacturing an array, comprising:

a. affixing a reactant to an oriented, heat shrink film to create binding sites on the film; and

b. applying energy to the film to reduce the size of the film, thereby increasing the density of binding sites on the film.

35. The method of claim 34 wherein the oriented, heat shrink film is selected from the group consisting of a biaxially oriented low density polyethylene, a biaxially oriented linear low density polyethylene, and a biaxially oriented ultra low density polyethylene.

36. The method of claim 34 wherein the reactant is selected from the group consisting of a nucleic acid, an antibody, an enzyme and a carbohydrate.

37. The method of claim 36 wherein the nucleic acid is an oligonucleotide.

38. The method of claim 37 wherein different oligonucleotides are affixed at varying binding sites on the substrate.

39. The method of claim 34 wherein the density of binding sites on the substrate after reduction is increased by a factor of about 4.

40. The method of claim 34 wherein the density of binding sites on the substrate after reduction is increased by a factor of about 10.

41. The method of claim 34 wherein the density of binding sites on the substrate after reduction is increased by a factor of greater than about 20.

42. The method of claim 34 wherein the reactant is affixed to the substrate by covalently binding the reactant to the substrate.

43. The method of claim 34 wherein the reactant is affixed to the substrate by ionically binding the reactant to the substrate.

44. A method of manufacturing a blank array, comprising functionalizing an oriented film substrate, thereby creating linking agents on said substrate for subsequent affixation of a reactant thereto.

45. The method of claim 44 further comprising reducing the size of the substrate, thereby increasing the density of linking agents on said substrate.

46. The method of claim 44 further comprising affixing a reactant to said linking agents.

47. The method of claim 44 further comprising affixing a plurality of reactants to said linking agents.

48. The method of claim 44 wherein the substrate is selected from the group consisting of a biaxially oriented low density polyethylene, a biaxially oriented linear low density polyethylene, and a biaxially oriented ultra low density polyethylene.

49. The method of claim 44 wherein said linking agents comprise an azlactone moiety.

50. The method of claim 44 wherein said surface is functionalized by reacting the surface with a chemical selected from the group consisting of a carboxylic acid, an amine, an epoxide, an azide and derivatives thereof.

51. A method of manufacturing a blank array, comprising:

a. stretching an elastomeric material having at least one major surface with a surface area; and

b. functionalizing the major surface, thereby creating linking agents on said substrate for ultimate affixation of a reactant.

52. The method of claim 51, further comprising the step of allowing said stretched elastomeric material to relax, thereby reducing the surface area of said major surface and increasing the density of linking agents on the substrate.

53. The method of claim 51 wherein the elastomeric substrate is selected from the group consisting of a polyisoprene, a nitrile, a polyurethane, and a silicone.

54. The method of claim 51 wherein the linking agents comprise an azlactone moiety.

55. The method of claim 51 wherein the major surface is functionalized by reacting the major surface with a carboxylic acid, an amine, an epoxide, an azide and derivatives thereof.

56. The method of claim 51 further comprising affixing a backing to said substrate after reduction of the surface area.